Though it is chemically related to meperidine, deliberate abuse or dependency on this drug has never been reported. A case is presented in which the patient had been using the drug regularly, in large doses, for its morphine-like euphoriant effects. He had been obtaining the drug easily from physicians, and a heightened level of awareness among doctors concerning the abuse potential of this drug should result in greater vigilance in prescribing it.

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Epiglottitis in an Immunosuppressed Host

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EPIGLOTTITIS is an acute infection of the supraglottic larynx with a major risk of airway obstruction secondary to cellulitis and edema. Diagnosis is made by history and examination of the epiglottis by lateral neck x-ray study or, preferably, indirect mirror examination. Treatment consists of maintaining an airway, and administration of antibiotics, oxygenated mist and probably corticosteroids. This case presented unique therapeutic problems because of the underlying malignancy, impaired immune status, previous therapy and essentially irreversible coagulopathy.

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Report of a Case

In a 16-year-old girl with stage IV non-Hodgkin lymphoma in relapse despite multiple chemotherapy regimens, increasing sore throat, fever and dysphagia developed. The patient was admitted to hospital. After specimens for culture were obtained, treatment was started with cephalothin, gentamicin and carbenicillin because of the compromised immune status and possible sepsis.

Initial examination showed mild pharyngeal inflammation and enlarged, tender cervical nodes. Blood and urine cultures showed no growth and a throat culture showed normal flora and Candida albicans. A complete blood count at admission showed 600 leukocytes, a hematocrit reading of 22 percent and a platelet count of 13,000, with bleeding noted from venipuncture sites and the nose. After six units of platelet transfusion, the platelet count was 20,000, with continued bleeding.

Because a throat culture showed Candida, amphotericin was added to the regimen on the second hospital day. At this time the sore throat and dysphagia were worse, the patient was unable to swallow her saliva and mild airway obstruction was present. A lateral neck roentgenogram (Figure 1) was obtained and showed a typical enlarged epiglottis consistent with epiglottitis. Otolaryngologic consultation was obtained and examination showed a pale, swollen epiglottis with edema compromising the supraglottic airway. It was felt that neither an atraumatically placed endotracheal tube nor the most meticulous tracheostomy was a safe procedure because of thrombocytopenia refractory to treatment associated with bleeding. It was elected to begin administration of corticosteroids, 12 mg of dexamethasone (Decadron) given intravenously, followed by 4 mg every six hours. Within 12 hours the patient's condition was improved, and she was able to swallow her own saliva and some liquids. Eighteen hours later a repeat lateral neck roentgenogram showed no abnormalities (Figure 2). Two days later the patient had resumed a regular diet and the epiglottis was found to be normal on examination. She was discharged home 11 days after admission without sequelae.

Discussion

Epiglottitis is traditionally classified as an infectious disease of the larynx, but because of its morbidity and mortality it would be better to

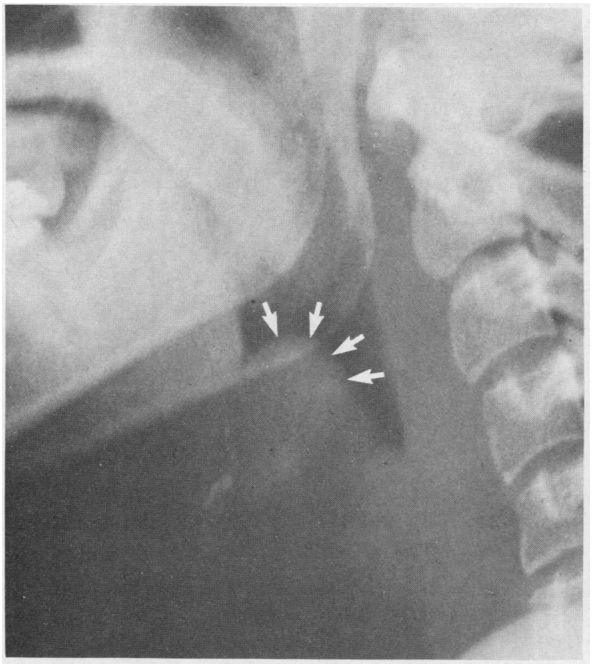

Figure 1.—Lateral neck x-ray film showing edematous epiglottis and effacement of vallecula.

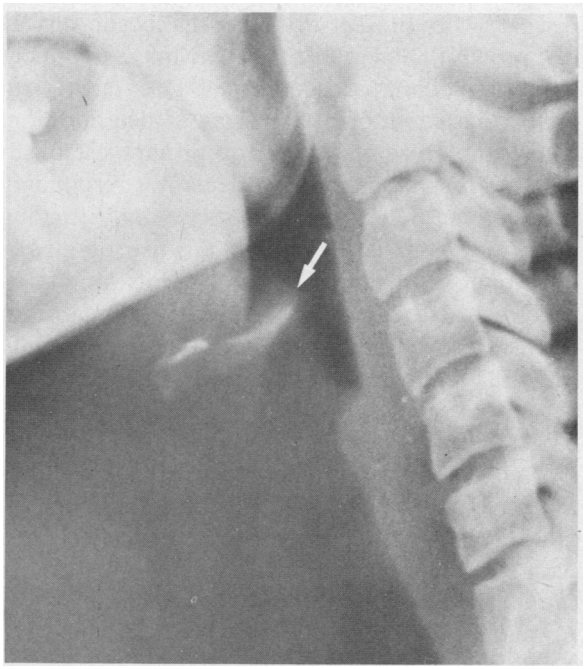

Figure 2.—Lateral neck x-ray film 18 hours after treatment, showing an almost normal epiglottis.

think of it as primarily an airway obstructive process in order to emphasize the most important aspects of its course. The disease occurs most often in young children, but also occurs in adolescents and adults. The clinical course is usually characterized in children by rapid progression from a mild upper respiratory infection to a state of severe toxicity and respiratory embarrassment.

The course from onset to severe respiratory obstruction can be as short as six hours. In adults, this progression may take longer because of a proportionately greater airway diameter and less reactive tissues.

Early in the course of the disease when the patient complains of only sore throat and fever, an unwary observer may see nothing on physical examination. If mirror laryngoscopy is not done, the correct diagnosis is not made and the patient may be sent home with the disorder having been diagnosed as viral upper respiratory infection. Usually, the child returns within 12 hours with respiratory distress and the correct diagnosis is made. It is important to emphasize that a lateral soft tissue x-ray study in a child with fever, sore throat and negative findings on examination of the throat (results would be positive if indirect laryngoscopy were carried out) will usually confirm the diagnosis of epiglottitis.

Findings late in the disease process include fever, dysphagia, drooling with inability to swallow, a barking cough and a muffled voice. Respirations are shallow and the patient assumes a position of maximal airway patency (sitting upright with neck and chin extended). Stridor may not be prominent because of the low volume of air being exchanged. Deterioration is marked by signs of increased heart rate and respiratory effort, irritability, cyanosis, fatigue and progressive airway obstruction.

Pathologically, the disease is a cellulitis of the supraglottic tissues, and the cause is most often a bacterial infection with Hemophilus influenza, although other bacteria have been cultured and viruses may be causative in some cases.[1]

Many physicians feel that this disease is a surgical emergency in young children, if not all patients, and a safe airway must be established before airway compromise progresses.[2] Considerable debate exists among various authors on the best method of establishing an airway—intubation or tracheostomy.[2-8] These authors do agree, however, that although medical therapy is important, establishment of an adequate airway is the primary concern. The role of steroids remains controversial because no double blind efficacy trials have been done.

Strome and Jaffe[9] have prepared a rational treatment approach to adult patients with this

disease who present without significant airway compromise. Their regimen includes treatment with ampicillin, corticosteroids and mist, with continuous monitoring for signs of deterioration. They emphasize the need for prompt establishment of a safe airway in patients not responding to treatment. They reported successfully treating eight of ten patients without the use of airway intervention. In the other two patients intubation was required. Hawkins[10] reviewed 17 cases in adults, 13 were successfully managed medically and four required tracheostomy.

Summary

A 16-year-old immunosuppressed patient presented with typical signs and symptoms of epiglottitis. Pronounced thrombocytopenia associated with bleeding prevented carrying out either a safe intubation or tracheostomy. The relation of the Candida albicans noted on throat culture to the epiglottitis is not known.

There was significant improvement in the patient's condition within several hours after dexamethasone and amphotericin were added to the treatment regimen. Because airway intervention was not required, the case falls into the category of a success of medical treatment in a patient with a compromised airway.

Conclusions

Epiglottitis is an acute infection of the supraglottic tissues with significant risk of airway obstruction. Treatment consists of antibiotics, oxygenated mist and probably corticosteroids. Vigilant airway monitoring and appropriate intervention are of paramount importance. An immunosuppressed patient with this disease presents special considerations: increased risk of infection, altered flora and thrombocytopenia with clinical coagulopathy modify standard therapeutic considerations.

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Leukoerythroblastic Reaction in Still Disease in an Adult

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A LEUKOERYTHROBLASTIC REACTION is characterized by the presence of immature erythrocytic and neutrophilic precursors in the peripheral blood.[1] The presence of these immature cells usually suggests evidence of a structural or neoplastic problem of the bone marrow. Such conditions are thought to allow the premature release of marrow precursor cells into the peripheral circulation. We recently treated a young woman in whom the final diagnosis of adult Still disease* was made more complicated by the presence of a leukoerythroblastic reaction. This paper discusses the course and treatment of the disease in this patient. In addition, we review the hematologic manifestations of Still disease in adults.

Report of a Case

A 19-year-old Mexican-American woman presented to the Los Angeles County-University of Southern California Medical Center on November 1, 1977, with a one-day history of a painful, swollen right knee. She also said she had had fever, chills, myalgias and a sore throat for the previous five days. Three days before admission, the knee had become painful, hot and swollen but these symptoms resolved spontaneously. In addition, she noted that her fingers were tender and swollen.

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*The WESTERN JOURNAL's style regarding eponyms is that they are not written in the possessive form; therefore Graves disease, Ewing sarcoma and Paget disease. An explanation may be found on page 78 of the July 1978 issue.

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